



P014E

O2 Sensor Slow Response - Rich to Lean Bank 2 Sensor 1

P014E means the upstream oxygen sensor on bank 2 is taking too long to switch from a rich signal to a lean signal, so the engine computer has flagged its response as sluggish. The computer watches the sensor voltage cross from above 600 millivolts to below 300 millivolts and logs this code when that rich-to-lean transition exceeds the calibrated time limit.

SYSTEM	CODE TYPE	SEVERITY	FIX DIFFICULTY	AREA
Powertrain	Generic (all makes)	Medium	Intermediate	Fuel and air metering

Symptoms you may notice

- Illuminated check engine light, often with no other noticeable symptoms
- A brief stumble or hesitation when the engine transitions from acceleration to cruise
- Slightly lower fuel economy as the computer defaults to a less precise fuel strategy
- Occasional rough idle that clears as soon as the engine warms and enters closed loop
- A faint sulfur or raw fuel smell from the exhaust during cold-start warm-up
- Failed emissions test readiness monitors for the oxygen sensor and catalyst

Common causes, most likely first

- 1 Aged or contaminated oxygen sensor that has lost its switching speed
- 2 Exhaust leak upstream of the sensor letting outside air pulse past the sensing element
- 3 Oil or coolant contamination from an internal engine or head gasket leak coating the sensor
- 4 Wiring damage or corroded connector pins adding resistance to the sensor signal circuit
- 5 A restricted or leaking fuel injector on bank 2 skewing the mixture the sensor sees
- 6 Low fuel pressure or a weak pump causing a lean condition the sensor cannot correct quickly
- 7 A lazy sensor heater that keeps the element below operating temperature at light load



How to diagnose and fix it

- 1 Scan all modules and record freeze-frame data to confirm the code set during a rich-to-lean transition and not a heater or circuit fault
- 2 Inspect the bank 2 upstream sensor wiring and connector for chafing, corrosion, or pushed-back pins
- 3 Perform a propane or smoke test around the bank 2 exhaust manifold and downpipe to rule out an upstream leak
- 4 Graph the bank 2 sensor 1 voltage against bank 1 sensor 1 on a test drive and compare transition times
- 5 Check fuel trims and injector balance on bank 2 to rule out a mixture problem before condemning the sensor
- 6 Replace the bank 2 upstream oxygen sensor with a quality direct-fit unit and clear the codes
- 7 Complete a drive cycle that includes several rich-to-lean transitions and verify the monitor passes

Why a slow O2 sensor fools good technicians

- A sensor can pass a static voltage test and still set P014E because the fault only appears during the fast rich-to-lean transition, so a voltmeter check at idle proves nothing.
Exhaust leaks between the cylinder head and the sensor are a common cause that gets missed, because the pulsing outside air makes the sensor look slow rather than lean.
- Replacing the sensor without checking fuel trims often leads to a repeat code when a leaking injector on bank 2 is the real source of the slow transition.
- Some vehicles set P014E when the sensor heater circuit is weak but not failed, so the element never reaches full switching temperature at light load.

A contaminated sensor from coolant or oil burning will usually show a slow response on both banks, so compare bank 1 and bank 2 graphs before replacing parts.

Can I keep driving with P014E?

The vehicle remains safe to drive because the fault affects fuel precision rather than immediate safety, but prolonged driving with a slow sensor can raise emissions and shorten catalytic converter life. Avoid heavy towing or sustained high-load driving until the fault is repaired, and address it before an emissions inspection.

Tools that help

- OBD-II scan tool with live data graphing
- Digital multimeter
- Propane enrichment tool or smoke machine
- Oxygen sensor socket
- Hand tools for exhaust and connector access



Reading P014E

P	Powertrain: engine, transmission and emissions.
0	Generic (SAE) code: it means the same thing on every OBD-II vehicle.
1	Fuel and air metering.
4E	The exact fault within that area.

Often seen with

P013E O2 Sensor Delayed Response - Rich to Lean Bank 1 Sensor 2 · **P0141** O2 Sensor Heater Circuit Malfunction (Bank 1 Sensor 2) · **P0150** O2 Sensor Circuit Malfunction (Bank 2 Sensor 1) · **P015E** Excessive Time to Enter Closed Loop Fuel Timing Control · **P0174** System Too Lean (Bank 2)

See it working

Watch the animated explainer [How a Manual Transmission Works: Four-Speed Cutaway](#) on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p014e/>

